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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Seiji Nakamura

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EXAMINER

WONG, TITUS

ART UNIT

PAPER NUMBER

2184

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,084	Applicant(s) NAKAMURA ET AL.	
	Examiner TITUS WONG	Art Unit 2184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The amendment filed on February 27, 2009 has been received and entered.

Applicant's Amendments to the Claims have been received and acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 2, 4, 10, and 13, it is not clear whether "command/response" indicates "command and response" or "command or response". Similar problems exist in claims 2, 4, 6, 7, 9, 10, 12, 14, and 15.

In claim 1, lines 11 and 14, it is not clear whether the same information is being transmitted twice since the "information specifying the block size" is transmitted to the electronic apparatus twice or if there are two different types of information. Similar problems exist in claims 6, 9, and 14.

In claim 1, lines 12 and 13, it is not clear which device is transmitting or receiving. Applicants should specify which device is transmitting the response and which device is receiving the information so that the invention is clear and avoids ambiguity. Similar problems exist in claims 6, 9, and 14.

The term "inability" in claim 1 is a relative term which renders the claim indefinite. The term "inability" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicants should clearly define what is meant being "unable" to accept data blocks and specify which device this "inability" pertains to. Similar problems exist in claims 2-4, 6, 9-12, and 14.

Applicant is required to review the claim and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki (US Publication No. 2003/0006279 A1) hereafter referred to as Saeki'279, in view of Bahng (U.S. Publication No. 2004/0001406 A1) hereafter referred to as Bahng'406

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and further in view of Asami. (US Patent No. 6,036,100) hereafter referred to as Asami'100.

Referring to claim 1, Saeki'279, as claimed, an electronic apparatus (see Fig. 4) comprising: an interface section (IC card reader/writer, see Fig. 4) that communicates with a host device (host device 2, see Fig. 4) through a command/response line and a data line (see Figs. 1,2, and 4), wherein: a command and a response are transmitted through the command/response line (transmits a telegraphic message from a host device or transmits a telegraphic message to a host device, see para. [0027], lines 4-7 and Fig. 1), and data is transmitted through the data line (see Fig. 5, blocks 101 and 103); the command, the response and the data are transmitted in this order between the electronic apparatus and the host device (Demand of next response/data block, respond with data/response block, see Figs. 1 and 2); the transmitted data is divided into data blocks with a block size specified by the host device when a length of the data is at least a predetermined length (divides the data into blocks of a predetermined length that does not exceed the memory capacity, see para. [0033], lines 8-10) and the interface section receives the information specifying the block size; a storage section that stores the received information specifying the block size (size of the data, see para. [0033], lines 4-6) and a data buffer that stores data (RAM 4, see Fig. 4), wherein when the specified block size is larger than a capacity of the data buffer (when the size of the data is bigger than the memory capacity, the host device 2 divides the host data into data blocks of a predetermined length that does not exceed the memory capacity, see para. [0033], lines 4-13 and Fig. 3).

However, Saeki'279 does not appear to teach the steps of receiving the block size and transmitting error information when an error condition is detected.

Bahng'406 discloses the steps of receiving the block size (sends a write command and data size information and receiving acknowledgement, see para. [0034])

Asami'100 further discloses transmitting error information when an error condition is detected (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise the steps of receiving the block size and transmitting error information when an error condition is detected, as taught by Bahng'406 and Asami'100, in order to determine the data size (see Bahng'406, para. [0034]) and provide improved data reliability and data transmission (see Asami'100, Col. 2, lines 27-32)

As to claim 2, Saeki'279 also discloses wherein the different command is a data block transmitting/receiving command (attaches a code to each of the response blocks to indicate whether or not it is the final block, see para. [0038], lines 1-7) which informs the electronic apparatus of transmitting or receiving the data blocks of the specified block size (divides the host data into blocks of predetermined length and sends them, see para. [0033], lines 8-10), and the electronic apparatus transmits the response, and does not accept the data blocks when the data blocks are transmitted from the host device via the data line (see Figs. 1 and 5).

However, Saeki'279 does not appear to teach transmitting error information.

Asami'100 further discloses transmitting error information (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise transmitting error information, as taught by Asami'100, in order to provide improved data reliability and data transmission (see Col. 2, lines 27-32)

As to claim 3, Saeki'279 also discloses wherein the different command is a next command (attaches a code to each of the blocks to indicate whether or not it is the final block, see para. [0034], lines 1-13) which is transmitted from the host device immediately after the block size setting command (transmissible data length, see para. [0005], lines 2-3), the electronic apparatus adds the response to the response corresponding to the next command, and then transmits the response (transmits response information, see para. [0036], lines 1-4 and Fig. 1).

However, Saeki'279 does not appear to teach transmitting error information.

Asami'100 further discloses transmitting error information (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise transmitting error information, as taught by Asami'100, in order to provide improved data reliability and data transmission (see Col. 2, lines 27-32)

As to claim 4, Saeki'279 also discloses wherein in case that the interface section receives a command including information specifying the block size of the data block from the host device via the command/response line and the specified block size included in the received command is larger than the capacity of the data buffer (see Fig. 3, step S13), when the electronic apparatus receives a data block transmitting/receiving command which informs the electronic apparatus of transmitting or receiving the data blocks of the specified block size from the host device (divides the data into blocks of a predetermined length that does not exceed the memory capacity, see para. [0033], lines 8-10), the electronic apparatus transmits a response acknowledging receipt of the data block transmitting/receiving command, and when the data blocks are transmitted from the host device, the electronic apparatus does not accept the data blocks (it is interpreted that the IC card only accepts data that is of a predetermined length, see para. [0033], lines 8-10), or when the electronic apparatus receives a next command which is transmitted immediately after the command including information specifying the block size, the electronic apparatus adds the error information about the inability of accepting data blocks of the specified block size to a response acknowledging receipt of the next command, and then transmits the response.

However, Saeki'279 does not appear to teach transmitting error information.

Asami'100 further discloses transmitting error information (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise transmitting

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error information, as taught by Asami'100, in order to provide improved data reliability and data transmission (see Col. 2, lines 27-32)

As to claim 5, Saeki'279 also discloses an IC card (IC card 3, see Fig. 4).

Referring to claim 6, Saeki'279, as claimed, a host device (host device 2, see Fig. 4) comprising: an interface section (interface with IC card reader/writer, see Fig. 4) that communicates with an electronic apparatus (IC card reader/writer or IC card 3, see Fig. 4) through a command/response line, wherein: and a data line (see Figs. 1, 2, and 4) a command and a response are transmitted through the command/response line (transmits a telegraphic message from a host device or transmits a telegraphic message to a host device, see para. [0027], lines 4-7 and Fig. 1), and data is transmitted through the data line (see Fig. 5, blocks 101 and 103); the command, the response and the data are transmitted in this order between the electronic apparatus and the host device (Demand of next response/data block, respond with data/response block, see Figs. 1 and 2): when the data is at least a predetermined length (divides the data into blocks of a predetermined length that does not exceed the memory capacity, see para. [0033], lines 8-10), the interface section transmits or receives data blocks with a predetermined block size created by dividing the data (host device divides the data into the data blocks of a predetermined length and sends them, see para. [0033], lines 4-10); the interface section informs the information specifying the block size of the data block (predetermined length, see para. [0033], lines 9-10 and Fig. 1); and when the interface section transmits a command different from the block size setting command and receives a response to the different command (IC card reader/writer 1 repeats the steps of receiving the response blocks from the IC card and of prompting IC card to

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send response blocks, see para. [0044], lines 1-4, para. [0043], lines 1-8, and Figs. 1,2, and 5), transmits an inquiry about a data capacity of a data buffer to the electronic apparatus (buffer size of RAM 4, see para. [0043], lines 9-12) through the command/response line, determines a new block size which is not more than the capacity of the data buffer in the electronic apparatus based on a response corresponding to the inquiry, and sets the new block size to the electronic apparatus (determines that the host data does not exceed memory capacity, see para. [0033], lines 9-10 and para. [0037], lines 3-5).

However, Saeki'279 does not appear to teach the steps of transmitting the block size and transmitting error information when an error condition is detected.

Bahng'406 discloses the steps of transmitting the block size (sends a write command and data size information and receiving acknowledgement, see para. [0034])

Asami'100 further discloses transmitting error information when an error condition is detected (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise the steps of transmitting the block size and transmitting error information when an error condition is detected, as taught by Bahng'406 and Asami'100, in order to determine the data size (see Bahng'406, para. [0034]) and provide improved data reliability and data transmission (see Asami'100, Col. 2, lines 27-32)

Note claims 7, 10, and 15 recite the corresponding limitations of claim 2. Therefore they are rejected based on the same reason accordingly.

Note claims 8, 11, and 16 recite the corresponding limitations of claim 3. Therefore they are rejected based on the same reason accordingly.

Note claim 9 recites the corresponding limitations of claim 1. Therefore it is rejected based on the same reason accordingly.

Note claim 12 recites the corresponding limitations of claim 4. Therefore it is rejected based on the same reason accordingly.

Note claim 13 recites the corresponding limitations of claim 5. Therefore it is rejected based on the same reason accordingly.

Note claim 14 recites the corresponding limitations of claim 6. Therefore it is rejected based on the same reason accordingly.

Response to Arguments

Applicant's arguments filed on 2/27/2009 have been fully considered but they are not persuasive.

Applicants argued that “Saeki’279 nor Asami’100 discloses that information on the block size is transmitted as data separately from the command.” (Bottom of page 9 of Amendment)

Applicant's arguments with respect to claims 1, 6, 9, and 14 have been considered but are moot in view of the new ground(s) of rejection.

In summary, Saeki’279, Bahng’406, and Asami’100 teach the claimed limitation as set forth.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Titus Wong whose telephone number is (571) 270-1627. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Henry Tsai can be reached on (571) 272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TW

**/Henry W.H. Tsai/
Supervisory Patent Examiner, Art Unit 2184**

